City of Casper
IT/GIS Department
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To: Natrona Regional Geospatial Cooperative (NRGC) Users

From: Steven Cowley, GIS Specialist

Date: 2016.6.28

Subject: *MrSid Generation 4 Imagery Processing for AutoCAD*

Technical Memorandum

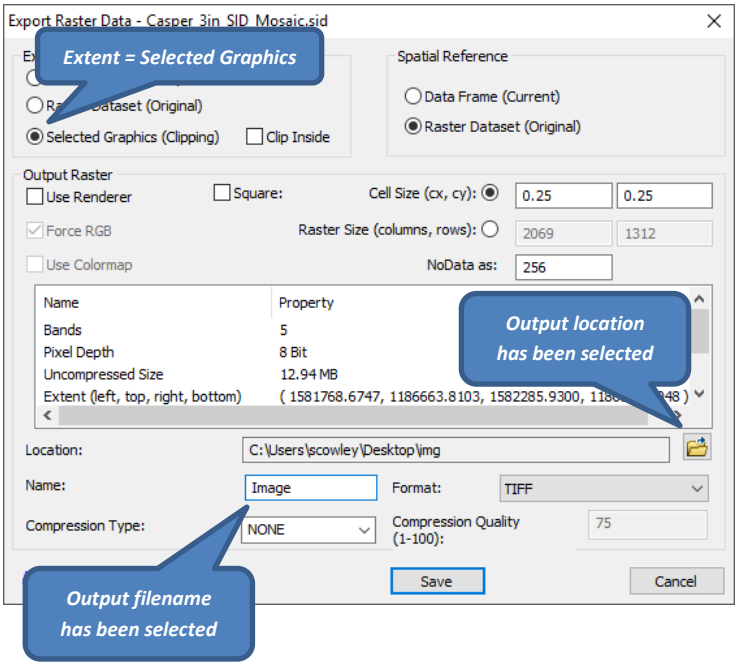
Overview:

As part of the 2015 aerial flight contract, the City of Casper received imagery files in MrSid format. These MrSid files were delivered in Generation 4 format, which is not supported in AutoCAD release 2015 or earlier. This incompatibility is based on an additional 5th band in the file that does not properly load or render in AutoCAD release 2015 or earlier. The following narrative outlines the steps necessary to process imagery from the MrSid files for use in AutoCAD release 2015 or earlier.

Process - Raster Export (In Map):

1. Open ArcMap and load the appropriate MrSid imagery file.
2. Zoom to the project area
3. Single-click the ***Rectangle*** icon on the ***Graphics*** toolbar
4. In the map, single-click and drag from the ***northwest*** of the project to the ***southeast*** of the project
    a. If a square clip area is desired, hold the ***Shift*** key when dragging the cursor
5. Right-click the ***Rectangle Graphic*** > ***Properties***
6. Change the ***Fill Color*** to ***No Color***
7. Click ***OK***
8. Verify that the graphic covers the clip area. Adjust the graphic as necessary using the graphic grips (cyan squares)
9. Right-Click the image in the ***Table of Contents*** > ***Data*** > ***Export Data. . .***
10. Verify the export parameters:

    a. Extent: ***Selected Graphics (Clipping)***
    b. Spatial Reference: ***Raster Dataset (Original)***
    c. Location: Project specific file folder
    d. Name: Project specific file name
    e. Format: ***TIFF*** (.tif)
    f. Compression: ***NONE***



11. Click ***Save***
12. Click ***No*** on the ***NoData*** pixels dialog box

Process - Raster Export (ArcToolbox):

1. Open ArcMap and load the appropriate MrSid imagery file and clipping shapefile/feature class.
2. Zoom to the project area
3. Click **ArcToolbox** > ***Data Management Tools*** > ***Raster*** > ***Raster Processing*** > ***Clip***
4. Verify the export parameters:
    a. Input Raster: ***MrSid imagery file***
    b. Output Extent: project specific shapefile/feature class
    c. Output Raster: Project specific file name with extension (***.tif***)
    d. NoData Value: ***256***
    e. Maintain Clipping Extent: ***Unchecked***
5. Click **Environments** > **Raster Storage**
    a. Compression: ***NONE***
6. Click ***OK***
7. Click ***OK***

Process – Composite Bands:

1. After the image has been clipped, **ArcToolbox** > ***Data Management Tools*** > ***Raster*** > ***Raster Processing*** > ***Composite Bands***

2. Click the ***Browse*** icon next to the ***Input Rasters*** field
3. Browse to the image created in the previous process
4. Double-click the image file to see the individual bands
5. Select bands ***1-4*** > Click ***Add***
6. Click the ***Browse*** icon next to the ***Output Raster*** field
7. Browse to the output location and enter the desired name and extension (***.tif***)
8. Click ***Save***
9. Click ***OK***
10. The newly created .tif file can now be used in AutoCAD.